

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



United States
Environmental Protection
Agency

Office of Pesticide Programs

MEMORANDUM

8/30/2021

SUBJECT: Product Chemistry Review for **Copper Armor**, EPA Reg. No.: **56601-U**
Case #: **00216529**

FROM: Bruce Averill *Bruce A. Averill*
Chemistry and Toxicology Team
RMB3
Antimicrobials Division (7510P)

THRU: Karen P. Hicks, Team Leader *KPH* 09/01/2021
Chemistry and Toxicology Team
RMB3
Antimicrobials Division (7510P)

TO: Eric Miederhoff, PM Team 31 / Tara Flint
Regulatory Management Branch I
Antimicrobials Division (7510P)

Registrant: PPG Industries
Action code: A540
Agency Due Date:
7/2/2021
Case No.: 00216529
DP No.: N/A
Submission No.: 1063708
E-Sub No.: N/A
Classification: EP
Process: Nonintegrated
system
Pesticide type:
Antimicrobial

MRID(s): 51433502, 51433503

Formulation from label			
PC code(s)	CAS #(s)	Active Ingredient(s)	% weight
042401	1317-38-0	Cupric oxide	0.30
		Other Ingredients	99.70
		Total	100%

I. BACKGROUND

On behalf of the Registrant, PPG Industries, Keller and Heckman LLP has submitted a revised application for pesticide registration for their product: Copper Armor, EPA Reg. No. 56601-U.

II. RELEVANT DOCUMENTS

	RECEIVED	N/A
EPA FORM 8570-27 – Formulator's Exemption Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EPA FORM 8570-35 – Data Matrix (5/28/2021)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cover letter (6/25/2021)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmittal document	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proposed CSF BASIC, (6/16/2021)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed CSF ALTERNATE, (6/16/2021)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proposed label, (6/25/2021)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Certification for Pilot Fragrance Notification Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
REFERENCED: CSF	--	
Comments:		

III. FINDINGS

a. Product Formulation:

	TGAI	MUP	EUP	Food use	Non-food use
Non-integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Integrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Active Ingredients(s)	Nominal		Upper limit	Lower limit	
Cupric oxide	0.30		0.33	0.27	
	YES		NO	N/A	
1. The certified limits of all ingredients are within 40 CFR standard certified limits.	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
2. Wider certified limits were requested and rationale was accepted.	<input type="checkbox"/>		<input type="checkbox"/>	X	
3. The nominal concentration(s) of the active ingredient is in agreement with the label.	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
4. The chemical IDs and analytical information for density, pH, and flammability are consistent with Series 830 Group B data.	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

5. All inert ingredients are approved for non-food use pesticide formulations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. The impurities present >0.1% are identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Impurities of toxicological significance have an upper certified limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

b. Product Label:

	Yes	NO	N/A
<i>The formula contains one of the following:</i>			
1. 10% or more of petroleum distillate	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. 1.0% or more of methyl alcohol	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sodium nitrite at any level	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. A toxic list 1 inert at any level	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Arsenic in any form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. If yes to 1-5, then the inert ingredient list contains a relevant footnote	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Appropriate warning statements regarding flammability or explosive characteristics of the product are included on the label	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The storage and disposal instructions for the pesticide container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The product requires an expiration date at which time the nominal concentration falls below the lower certified limit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV. Additional Findings

The CSFs for the basic and alternate formulations (dated 6/16/2021) are acceptable. The certified limits for all ingredients agree with 40 CFR §158.350. All ingredients have been cleared for use in pesticide formulations. Percentages on label match composition of product.

V. Conclusion

The registrant has satisfied the CSF requirements for registration of a new basic and alternate formulation of EPA Reg. No. **56601-U**. EPA approves said CSFs.

VI. Table A:**Series 830 guidelines – Group A**

OPPTS#	Name	Status	MRID
830.1550	Product Identity & Composition	Acceptable	51433502
830.1600	Description of materials	Acceptable	51433502
830.1620	Description of production process	Waived	N/A
830.1650	Description of formulation process	Acceptable	51433502
830.1670	Discussion of formation of impurities	Acceptable	51433502
830.1700	Preliminary analysis	Acceptable	51433502
830.1750	Certified limits	Acceptable	51433502
830.1800	Enforcement analytical method	Acceptable	51433502
830.1900	Submittal of samples	Acceptable	51433502

VII. Table B: Series 830 guidelines – Group B

OPPTS#	Name	Study Findings/Comment	Status	MRID
830.6302	Color	Not required for end use product	Not applicable	N/A
830.6303	Physical state	liquid	Acceptable	51433503
830.6304	Odor	Not required for end use product	Not applicable	N/A
830.6313	Stability to normal & elevated temperatures, metals & metal ions	The product is not TGA	Not applicable	N/A
830.6314	Oxidation/Reduction	No oxidizer/reducer present	Not applicable	N/A
830.6315	Flammability	Product is not potentially flammable	Not applicable	N/A
830.6316	Explodability	Product does not contain explosive ingredients	Not applicable	N/A
830.6317	Storage stability	3 years	Acceptable	51433503
830.6319	Miscibility	Product not mixed with organic solvents	Not applicable	N/A
830.6320	Corrosion characteristics	Will rust unlined metal containers	Acceptable	51433503
830.6321	Dielectric breakdown voltage	Product not used near electrical equipment	Not applicable	N/A
830.7000	pH	7.9	Acceptable	51433503
830.7050	UV/Visible absorption	The product is not TGA	Not applicable	N/A
830.7100	Viscosity	2300 mPa	Acceptable	51433503
830.7200	Melting point	Not required for MUP or EP	Not applicable	N/A
830.7220	Boiling point	Not required for MUP or EP	Not applicable	N/A
830.7300	Density/relative	1.2805 g/cm ³ (semi-gloss) 1.2953 g/cm ³ (eggshell)	Acceptable	N/A
830.7370	Dissociation constants in water	Not required for MUP or EP	Not applicable	N/A
830.7520	Particle size	Not required for MUP or EP	Not applicable	N/A
830.7550/ 7560/ 7570	Partition coefficient	Not required for MUP or EP	Not applicable	N/A
830.7840/ 7860	Water solubility	Not required for MUP or EP	Not applicable	N/A

830.7950	Vapor pressure	Not required for MUP or EP	Not applicable	N/A
----------	----------------	----------------------------	----------------	-----

